CIVIL-TECH CONSULTANTS AND ENGINEERS

Building & Highway Material Testing Laboratory

An ISO 9001:2008 Certified Company

NABL - Accredited Laboratory as per ISO / IEC-17025 : 2005

Job No.: CTCE/BBMP/MEW/W.No.14/WMM/Shape.T/2017-18 12.06.2017

TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works, (Prop. G. Venkatesh),** No. 243, 15th D Cross, 2nd stage, 2nd phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	:	Improvements and asphalting to 9th and 10th Main Bhuvaneshwari Nagara (left side and right side) 1st Main Brundavana Layout and Cross Roads in Bagalagunte Ward No. 14, Dasarahalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/DZ/AEE/TDSD/PR/95/2017-18 Dated: 06.06.2017
* Sample ID	:	Wet Mix Macadam
Technical Reference	:	IS 2386(Part 1) 1963 (RA 2011)
Date of Testing	:	12.06.2017

Sl.No.	Description	Result
1	Flakiness Index	12.63%
2	Elongation Index	13.62%
3	Combined Flakiness & Elongation Index	26.25%

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Flakiness & Elongation Index for Wet Mix Macadam is 30%

Note:

⇒The report shall not be reproduced, except in full, without the written approval of the laboratory.

⇒The results indicated above are based on the tests carried out on the samples received in the laboratory

⇒Any Query regarding the report must be reported within 30 days from the date of testing.

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ಟಿ.ದಾಸರಹಳ್ಳಿ ಉಪ-ವಿಭಾಗ
ಬಾಗಲಗುಂಟೆ, ಬಿಬಿಎಂಪಿ
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#23/14, 7th Cross, 3rd Stage, 4th Block,
Shakthi Ganapathinagar,
Basaveshwaranagar, Bangalore-560 079.

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T-2377

Job No.: CTCE/BBMP/MEW/W.No.14/CSR-06/363f/QB(BM)/2017-18 17.06.2017

TEST REPORT ON DETERMINATION OF BITUMEN CHARACTERISTICS

* Customer	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works,** (Prop. G. Venkatesh), No. 243, 15th D Cross, 2nd stage, 2nd phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of work	:	Improvements and asphalting to 9th and 10th Main Bhuvaneshwari Nagara (left side and right side) 1st Main Brundavana Layout and Cross Roads in Bagalagunte Ward No. 14, Dasarahalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/DZ/AEE/TDSD/PR/95/2017-18 Dated: 06.06.2017
* Sample ID	:	Bitumen
Source/ Location	:	Hot Mix Plant, Bangalore.
Sample Received on	:	15.06.2017
Period of Testing	:	15.06.2017 to 17.06.2017

The results of the tests conducted on the bitumen sample are as follows:

Sl. No	Description	Test Method as per IS	Test Result	Requirement as per IS:73:2013
1	Penetration at 25 ^{0}C, 1/10 mm	IS :1203 -1978 (RA-2014)	82	80 to 100
2	Softening point, ^{0}C	IS :1205 -1978 (RA-2014)	44	Min. 40
3	Ductility at 27^{0}C, cm	IS :1208 -1978 (RA-2014)	100 >	Min. 75
4	Flash Point, ^{0}C	IS :1209 -1978 (RA-2014)	306	Min. 220

* Information is furnished by the Customer/Representative

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VIDYARANI P.K.
Technical Manager

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Job No: CTCE/BBMP/MEW/W.No.14/BM/AIV/2017-18

17.06.2017

TEST REPORT ON IMPACT VALUE OF AGGREGATES

* Customer	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
* Agency	:	**M/s. Mahendra Engineering Works, (Prop. G. Venkatesh),** No. 243, 15th D Cross, 2nd stage, 2nd phase, West of Chord Road, Mahalakshmipuram, Bangalore – 560 086.
* Name of Work	:	Improvements and asphalting to 9th and 10th Main Bhuvaneshwari Nagara (left side and right side) 1st Main Brundavana Layout and Cross Roads in Bagalagunte Ward No. 14, Dasarahalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/DZ/AEE/TDSD/PR/95/2017-18 Dated: 06.06.2017
* Sample ID	:	Hot Mix Plant, Bangalore
Technical Reference	:	IS : 2386(Part -4)-1963 (RA-2011)
* Type of Mix	:	Bituminous Macadam
Date of Testing	:	17.06.2017

Sl No.	Details	Trial No. 1	Trial No. 2	Average
1	Total weight of aggregate sample filling the cylindrical measure = W_1 g	393	398	
2	Weight of agregate passing 2.36 mm sieve after the test = W_2 g	84	85	
3	Weight of aggregate retained 2.36 mm sieve after the test = W_3 g	309	313	
4	Aggregate Impact value = percent fines 100* (W2/W1)%	21.37	21.36	21.37

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Impact value for Bituminous Macadam is 30%

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ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರ ಕಛೇರಿ *********
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TEST REPORT ON FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

* Customer	:	**Asst. Executive Engineer,** T. Dasarahalli Sub Division, BBMP, Bangalore.
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* Reference	:	BBMP/DZ/AEE/TDSD/PR/95/2017-18 Dated: 06.06.2017
* Sample ID	:	Hot Mix Plant, Bangalore
Technical Reference	:	IS : 2386(Part -1)-1963 (RA-2011)
* Type of Mix	:	Bituminous Macadam
Date of Testing	:	19.06.2017

Sl.No.	Description	Result
1	Flakiness Index	11.65%
2	Elongation Index	13.25%
3	Combined Flakiness & Elongation Index	24.90%

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Flakiness & Elongation Index for Bituminous Macadam is 30%

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